

REQUEST FOR COUNCIL ACTION

SUBJECT: Water Master Plan Amendment No. 3

SUMMARY: Approve Amendment No. 3 to the Professional Services Agreement with Hansen, Allen and Luce, Inc. to include additional water infrastructure economic analysis in Zones 5 & 6 as part of the Water Master Plan Update, in an amount not to exceed \$4,900.00.

FISCAL IMPACT: Funds are available in the Capital Water Account.

STAFF RECOMMENDATION:

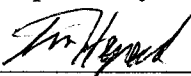
Staff recommends approval of Amendment No. 3 to the Professional Services Agreement with Hansen, Allen and Luce, Inc. to include additional economic water infrastructure analysis in Zones 5 & 6 as part of the Water Master Plan Update, in an amount not to exceed \$4,900.00.

MOTION RECOMMENDED:

"I move to adopt Resolution No. 15-152 authorizing the Mayor to execute Amendment No. 3 to the Professional Services Agreement with Hansen, Allen and Luce, Inc. to include additional water infrastructure economic analysis in Zones 5 & 6 as part of the Water Master Plan Update, in an amount not to exceed \$4,900.00.


Roll Call vote required

Prepared by:



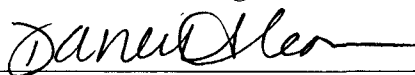
Tim Heyrend, P.E.
Utilities Engineer

Reviewed by:



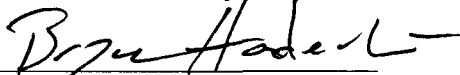
Wendell T. Rigby, P.E.
Director of Public Works

Reviewed as to Legal Sufficiency:



Jeffery Robinson
Interim City Attorney

Recommended by:



Bryce Haderlie
Interim City Manager

BACKGROUND DISCUSSION:

The City has hired the engineering firm Hansen, Allen and Luce, Inc. (HAL) to prepare a Water Master Plan update, including modeling analysis and creation of an updated capital projects list. One of the recommendations provided in the Draft Master Plan is to construct 2 new reservoirs in the zone 5 water pressure zone located east of U111.

Currently, the zone 5 water pressure zone is serviced by pumping water from the Grizzly pump station at 7800 South and Grizzly Way to the water storage reservoirs located at U-111 and 7800 South. And then to pump the water up the mountain to the zone 6 water storage reservoir, and allowing the water to drain back down into zone 5. By installing zone 5 reservoirs, pumping costs would be reduced, as the zone 5 reservoir elevation is lower than the zone 6 reservoir, thus requiring less energy.

The economic analysis will determine the costs associated with constructing the additional reservoirs, land purchase for the reservoir sites, and ongoing operations and maintenance. The study will compare these costs against the energy savings of pumping to a lower elevation. Once the study is complete, the City will be able to make a more informed decision on whether to build the zone 5 water reservoirs, or to keep operating as we currently are by pumping water up to zone 6 and then feeding zone 5.

Attachments:

Resolution

Amendment No. 3

THE CITY OF WEST JORDAN, UTAH
A Municipal Corporation

RESOLUTION NO. 15-152

A RESOLUTION AUTHORIZING THE MAYOR TO EXECUTE AMENDMENT NO. 3 TO THE
PROFESSIONAL SERVICES AGREEMENT BETWEEN
THE CITY AND HANSEN, ALLEN AND LUCE, INC.

WHEREAS, the City Council of the City of West Jordan has reviewed Amendment No. 3 to the Professional Services Agreement between the City of West Jordan and Hansen, Allen, and Luce, Inc. (a copy of which is attached) for additional services related to the Water Master Plan in an amount not to exceed \$4,900; and

WHEREAS, the City Council of the City of West Jordan desires to approve Amendment No. 3 to the Professional Services Agreement with Hansen, Allen, and Luce, Inc. services related to the Water Master Plan in an amount not to exceed \$4,900.

NOW, THEREFORE, IT IS RESOLVED BY THE CITY COUNCIL OF WEST JORDAN, UTAH, THAT:

Section 1. After approval as to legal form, the Mayor is hereby authorized and directed to approve Amendment No. 3 to the Professional Services Agreement with Hansen, Allen, and Luce, Inc. for the Water Master Plan in an amount not to exceed \$4,900.00.

Section 2. This Resolution shall take effect immediately upon passage.

Adopted by the City Council of West Jordan, Utah this 12th day of August 2015.

Kim V. Rolfe
Mayor

ATTEST:

MELANIE S. BRIGGS
City Recorder

Voting by the City Council	"AYE"	"NAY"
Jeff Haaga	_____	_____
Judy Hansen	_____	_____
Chris McConnehey	_____	_____
Chad Nichols	_____	_____
Sophie Rice	_____	_____
Ben Southworth	_____	_____
Mayor Kim V. Rolfe	_____	_____

AMENDMENT NO. 3
TO AN AGREEMENT
FOR PROFESSIONAL SERVICES
BETWEEN THE CITY OF WEST JORDAN
AND
Hansen, Allen and Luce, Inc.

THIS AMENDMENT, made and entered into this 12th day of August 2015 by and between the CITY OF WEST JORDAN, a municipal corporation (hereinafter referred to as "City"), and Hansen Allen & Luce, Inc.(hereinafter referred to as "Consultant").

The City and Consultant agree as to amend the following sections of the original Professional Services Agreement to provide additional engineering services for the Water Master Plan Update to include analysis of future water infrastructure in Zones 5 and 6.

2. DESCRIPTION OF SERVICES

The services to be performed by Consultant are as follows:

Provide for additional engineering services for the Water Master Plan Update as described in the attached Consultant's proposal dated July 23, 2015.

3. COMPENSATION AND PAYMENT

The total compensation payable to Consultant by City for the services described in Paragraph 2 shall not exceed the sum of **\$4,900** for Amendment No. 3 bringing the total not-to exceed fee to \$101,787.50 for services under this contract.

In concurrence and witness whereof, this Agreement has been executed by the parties effective on the date and year first above written.

CITY OF WEST JORDAN

Kim V. Rolfe, Mayor

APPROVED AS TO ADMINISTRATION:

Melanie Briggs, City Recorder

CONSULTANT

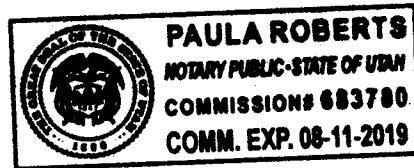

Hansen, Allen and Luce, Inc.

STATE OF Utah

COUNTY OF Salt Lake

On this 29 day of July, 2015 personally appeared before me, _____
Steven B. Jones, who being by me duly sworn did say that he is the Principal
of Hansen, Allen & Luce, Inc., a Utah
corporation, and that the foregoing instrument was signed in behalf of said corporation by authority of its
Board of Directors, and he acknowledged to me that said corporation executed the same.


NOTARY PUBLIC



My Commission Expires: 08-11-2019

Residing in Wendy County, Utah

MEMORANDUM

DATE: July 23, 2015
TO: Tim Heyrend, P.E.
Utilities Engineer
801-569-5086
City of West Jordan
8000 South Redwood Road
West Jordan, UT 84088

FROM: Steven C. Jones, P.E.
Hansen, Allen & Luce, Inc. (HAL)
6771 South 900 East
Midvale, Utah 84047

SUBJECT: Proposal for Economic Analysis of Future Water Infrastructure in Zones 5 and 6

Thank you for the opportunity to provide an economic analysis of future reservoirs and pump stations in Zones 5 and 6. Our estimated fee is \$4,900.

OBJECTIVE

Our objective is to provide a 25- and 50-year economic analysis that will help the City decide on future water infrastructure in Zones 5 and 6.

SCOPE OF WORK

We will follow the scope outlined in the attached email to determine the value of constructing two Zone 5 reservoirs and a pump station versus using the existing and future Zone 6 reservoirs and pump stations. The analysis will consider both capital and operational costs, including energy costs for pumping to each zone. We will provide a final memorandum to document our methods, analysis, and results.


COST ESTIMATE

We propose completing the work on a time-and-materials basis with a not-to-exceed contract amount of \$4,900.00.

We appreciate this opportunity and are prepared to begin work when the City is ready. We invite you to contact us if you have any questions about our proposal.

Sincerely,

HANSEN, ALLEN & LUCE, INC.


Steven C. Jones, M.S., P.E.
Principal

Steven Jones

From: Tim Heyrend <timh@wjordan.com>
Sent: Tuesday, July 21, 2015 5:29 PM
To: sjones@hansenallenluce.com
Cc: Roger Payne; David Murphy
Subject: West Jordan Economic Analysis for Zone 5 Reservoirs

Steve,

Can you please provide a quote to perform an economic analysis of constructing the 2-zone 5 reservoirs and pump station versus using the zone 6 existing and future reservoirs and pump stations.

Here is the scope:

Provide a cost comparison of energy savings to pump to lower elevation zone 5 reservoirs with the cost of constructing, operating, and maintaining the reservoirs and pump station.

- 1) What is the energy savings over a 25 and 50 year period, cost basis of energy from Rocky Mountain Power, how much energy required to pump to lower elevation versus higher zone 6 elevation, include estimated cost inflation from RMP.
- 2) What is the peaking factor savings from JVVCD?
- 3) What is the transmission pipeline rebuild savings, assuming the City would need to upsize the pipe from 78th & U-111 to the existing zone 6 tanks (note: this 20" pipe size may be OK after the State approves our request to use actual water use numbers)?
- 4) What is the cost to build the zone 5 reservoirs, subtract the cost to reduce the size of the zone 6 reservoirs to 2-million gallons (1.5 MG is just too small for us), the old master plan showed a pump station at the Terminal Reservoir at New Bingham Highway – so the pump station proposed is likely equivalent in cost, if not please include the difference.
- 5) Land cost to purchase the property needs to be set at \$150,000 per acre.
- 6) Use Reservoir construction cost of \$1.37 M for each Million gallons – excluding land cost.
- 7) I don't have any 16-inch ductile iron pipe costs.

Thanks,

Tim Heyrend, P.E.
Utilities Engineer
City of West Jordan
8000 South Redwood Rd.
West Jordan, UT 84088
801-569-5086